

General

Title

Use of multiple concurrent antipsychotics in children and adolescents: percentage of children and adolescents 1 to 17 years of age who were on two or more concurrent antipsychotic medications.

Source(s)

National Committee for Quality Assurance (NCQA). HEDIS 2016: Healthcare Effectiveness Data and Information Set. Vol. 1, narrative. Washington (DC): National Committee for Quality Assurance (NCQA); 2015. various p.

National Committee for Quality Assurance (NCQA). HEDIS 2016: Healthcare Effectiveness Data and Information Set. Vol. 2, technical specifications for health plans. Washington (DC): National Committee for Quality Assurance (NCQA); 2015. various p.

Measure Domain

Primary Measure Domain

Clinical Quality Measures: Process

Secondary Measure Domain

Does not apply to this measure

Brief Abstract

Description

This measure is used to assess the percentage of children and adolescents 1 to 17 years of age who were on two or more concurrent antipsychotic medications.

Rationale

Antipsychotic prescribing for children has increased rapidly in recent decades, driven by new prescriptions and by longer duration of use (Patten, Waheed, & Bresee, 2012). The frequency of prescribing antipsychotics among youth increased almost fivefold from 1996 to 2002, from 8.6 per 1,000 children to 39.4 per 1,000 (Cooper et al., 2006). Although some evidence supports the efficacy of antipsychotics in

youth for certain narrowly defined conditions, less is known about the safety and effectiveness of antipsychotic prescribing patterns in community use (e.g., combinations of medications, off-label prescribing, dosing outside of recommended ranges).

Both the efficacy and side effects of antipsychotic medications vary by age. Children and adolescents prescribed antipsychotics are more at risk for serious health concerns, including weight gain, extrapyramidal side effects, hyperprolactinemia and some metabolic effects (Correll, Kratochvil, & March, 2011). This suggests that use of multiple concurrent antipsychotics may pose differing risks for children and adolescents compared with adults. While there is no research on long-term effects of multiple concurrent antipsychotics on children's health, the increased side effect burden of certain antipsychotic medications for youth has implications for future physical health concerns including obesity and diabetes. Girls treated with certain antipsychotics may also be at increased risk for gynecological problems (Talib & Alderman, 2013) and osteoporosis (Cohen et al., 2012). Risks of multiple concurrent antipsychotics, compared with monotherapy, have not been systematically investigated; existing evidence appears largely in case reports (Safer, Zito, & DosReis, 2003). In general, the field also lacks high-quality studies of side effects associated with the use of multiple concurrent antipsychotic medications in adults (Lochmann van Bennekom, Gijsman, & Zitman, 2013).

The American Academy of Child and Adolescent Psychiatry (AACAP) (2011) recommends that clinicians avoid the simultaneous use of multiple concurrent antipsychotic medications for children and adolescents.

Evidence for Rationale

American Academy of Child and Adolescent Psychiatry (AACAP). Practice parameter for the use of atypical antipsychotic medications in children and adolescents. Washington (DC): American Academy of Child and Adolescent Psychiatry (AACAP); 2011. 27 p.

Cohen D, Bonnot O, Bodeau N, Consoli A, Laurent C. Adverse effects of second-generation antipsychotics in children and adolescents: a Bayesian meta-analysis. *J Clin Psychopharmacol*. 2012 Jun;32(3):309-16. [PubMed](#)

Cooper WO, Arbogast PG, Ding H, Hickson GB, Fuchs DC, Ray WA. Trends in prescribing of antipsychotic medications for US children. *Ambul Pediatr*. 2006 Mar-Apr;6(2):79-83. [PubMed](#)

Correll CU, Kratochvil CJ, March JS. Developments in pediatric psychopharmacology: focus on stimulants, antidepressants, and antipsychotics. *J Clin Psychiatry*. 2011 May;72(5):655-70. [PubMed](#)

Lochmann van Bennekom MW, Gijsman HJ, Zitman FG. Antipsychotic polypharmacy in psychotic disorders: a critical review of neurobiology, efficacy, tolerability and cost effectiveness. *J Psychopharmacol (Oxford)*. 2013 Apr;27(4):327-36. [PubMed](#)

National Committee for Quality Assurance (NCQA). HEDIS 2016: Healthcare Effectiveness Data and Information Set. Vol. 1, narrative. Washington (DC): National Committee for Quality Assurance (NCQA); 2015. various p.

Patten SB, Waheed W, Bresee L. A review of pharmacoepidemiologic studies of antipsychotic use in children and adolescents. *Can J Psychiatry*. 2012 Dec;57(12):717-21. [PubMed](#)

Safer DJ, Zito JM, DosReis S. Concomitant psychotropic medication for youths. *Am J Psychiatry*. 2003 Mar;160(3):438-49. [PubMed](#)

Talib HJ, Alderman EM. Gynecologic and reproductive health concerns of adolescents using selected psychotropic medications. *J Pediatr Adolesc Gynecol*. 2013 Feb;26(1):7-15. [PubMed](#)

Primary Health Components

Antipsychotic medications; children; adolescents

Denominator Description

Children and adolescents age 1 to 17 years as of December 31 of the measurement year with 90 days of continuous antipsychotic medication treatment during the measurement year (see the related "Denominator Inclusions/Exclusions" field)

Numerator Description

Members on two or more concurrent antipsychotic medications for at least 90 consecutive days during the measurement year (see the related "Numerator Inclusions/Exclusions" field)

Evidence Supporting the Measure

Type of Evidence Supporting the Criterion of Quality for the Measure

A clinical practice guideline or other peer-reviewed synthesis of the clinical research evidence

A formal consensus procedure, involving experts in relevant clinical, methodological, public health and organizational sciences

One or more research studies published in a National Library of Medicine (NLM) indexed, peer-reviewed journal

Additional Information Supporting Need for the Measure

Unspecified

Extent of Measure Testing

All HEDIS measures undergo systematic assessment of face validity with review by measurement advisory panels, expert panels, a formal public comment process and approval by the National Committee for Quality Assurance's (NCQA's) Committee on Performance Measurement and Board of Directors. Where applicable, measures also are assessed for construct validity using the Pearson correlation test. All measures undergo formal reliability testing of the performance measure score using beta-binomial statistical analysis.

Evidence for Extent of Measure Testing

Rehm B. (Assistant Vice President, Performance Measurement, National Committee for Quality Assurance, Washington, DC). Personal communication. 2015 Mar 16. 1 p.

State of Use of the Measure

State of Use

Current routine use

Current Use

not defined yet

Application of the Measure in its Current Use

Measurement Setting

Managed Care Plans

Professionals Involved in Delivery of Health Services

not defined yet

Least Aggregated Level of Services Delivery Addressed

Single Health Care Delivery or Public Health Organizations

Statement of Acceptable Minimum Sample Size

Unspecified

Target Population Age

Age 1 to 17 years

Target Population Gender

Either male or female

National Strategy for Quality Improvement in Health Care

National Quality Strategy Aim

Better Care

National Quality Strategy Priority

Prevention and Treatment of Leading Causes of Mortality

Institute of Medicine (IOM) National Health Care Quality

Report Categories

IOM Care Need

Living with Illness

IOM Domain

Effectiveness

Data Collection for the Measure

Case Finding Period

The measurement year

Denominator Sampling Frame

Enrollees or beneficiaries

Denominator (Index) Event or Characteristic

Patient/Individual (Consumer) Characteristic

Therapeutic Intervention

Denominator Time Window

not defined yet

Denominator Inclusions/Exclusions

Inclusions

Children and adolescents age 1 to 17 years as of December 31 of the measurement year with 90 days of continuous antipsychotic medication treatment during the measurement year

Identify members in the specified age range who were dispensed an antipsychotic medication during the measurement year. Refer to Table APC-A in the original measure documentation for a list of antipsychotic medications.

For each member, identify all antipsychotic medication dispensing events (prescriptions) during the measurement year.

For each member, identify those with greater than or equal to 90 consecutive treatment days.

Note:

Members must have been continuously enrolled during the measurement year.

Allowable Gap: No more than one gap in continuous enrollment of up to 45 days during the measurement year. To determine continuous enrollment for a Medicaid beneficiary for whom enrollment is verified monthly, the member may not have more than a 1-month gap in coverage.

Refer to the original measure documentation for steps to identify the eligible population.

Exclusions

Unspecified

Exclusions/Exceptions

not defined yet

Numerator Inclusions/Exclusions

Inclusions

Members on two or more concurrent antipsychotic medications for at least 90 consecutive days during the measurement year

Note: Refer to the original measure documentation for steps to identify numerator compliance.

Exclusions

Unspecified

Numerator Search Strategy

Fixed time period or point in time

Data Source

Administrative clinical data

Pharmacy data

Type of Health State

Does not apply to this measure

Instruments Used and/or Associated with the Measure

Unspecified

Computation of the Measure

Measure Specifies Disaggregation

Does not apply to this measure

Scoring

Rate/Proportion

Interpretation of Score

Desired value is a lower score

Allowance for Patient or Population Factors

not defined yet

Description of Allowance for Patient or Population Factors

This measure requires that separate rates be reported for commercial and Medicaid product lines.

Report three age stratifications and a total rate:

- 1 to 5 years
- 6 to 11 years
- 12 to 17 years
- Total

The total is the sum of the age stratifications.

Standard of Comparison

not defined yet

Identifying Information

Original Title

Use of multiple concurrent antipsychotics in children and adolescents (APC).

Measure Collection Name

HEDIS 2016: Health Plan Collection

Measure Set Name

Effectiveness of Care

Measure Subset Name

Overuse/Appropriateness

Submitter

National Committee for Quality Assurance - Health Care Accreditation Organization

Developer

National Committee for Quality Assurance - Health Care Accreditation Organization

Funding Source(s)

Unspecified

Composition of the Group that Developed the Measure

National Committee for Quality Assurance's (NCQA's) Measurement Advisory Panels (MAPs) are composed of clinical and research experts with an understanding of quality performance measurement in the particular clinical content areas.

Financial Disclosures/Other Potential Conflicts of Interest

In order to fulfill National Committee for Quality Assurance's (NCQA's) mission and vision of improving health care quality through measurement, transparency and accountability, all participants in NCQA's expert panels are required to disclose potential conflicts of interest prior to their participation. The goal of this Conflict Policy is to ensure that decisions which impact development of NCQA's products and services are made as objectively as possible, without improper bias or influence.

Adaptation

This measure was not adapted from another source.

Date of Most Current Version in NQMC

2015 Oct

Measure Maintenance

Unspecified

Date of Next Anticipated Revision

Unspecified

Measure Status

This is the current release of the measure.

This measure updates previous versions:

National Committee for Quality Assurance (NCQA). HEDIS 2015: Healthcare Effectiveness Data and Information Set. Vol. 1, narrative. Washington (DC): National Committee for Quality Assurance (NCQA); 2014. various p.

National Committee for Quality Assurance (NCQA). HEDIS 2015: Healthcare Effectiveness Data and Information Set. Vol. 2, technical specifications for health plans. Washington (DC): National Committee for Quality Assurance (NCQA); 2014. various p.

Measure Availability

Source available for purchase from the [National Committee for Quality Measurement \(NCQA\) Web site](#)

For more information, contact NCQA at 1100 13th Street, NW, Suite 1000, Washington, DC 20005; Phone:

Companion Documents

The following is available:

National Committee for Quality Assurance (NCQA). HEDIS 2016: Healthcare Effectiveness Data and Information Set. Vol. 2, technical update. Washington (DC): National Committee for Quality Assurance (NCQA); 2015 Oct 1. 12 p.

For more information, contact the National Committee for Quality Assurance (NCQA) at 1100 13th Street, NW, Suite 1000, Washington, DC 20005; Phone: 202-955-3500; Fax: 202-955-3599; Web site: www.ncqa.org .

NQMC Status

This NQMC summary was completed by ECRI Institute on April 10, 2015.

This NQMC summary was updated by ECRI Institute on February 9, 2016.

Copyright Statement

This NQMC summary is based on the original measure, which is subject to the measure developer's copyright restrictions.

Content adapted and reproduced with permission from the National Committee for Quality Assurance (NCQA). HEDIS® is a registered trademark of NCQA. HEDIS measures and specifications were developed by and are owned and copyrighted by NCQA. HEDIS measures and specifications are not clinical guidelines and do not establish a standard of medical care. NCQA makes no representations, warranties, or endorsement about the quality of any organization or physician that uses or reports performance measures and NCQA has no liability to anyone who relies on such measures or specifications. Limited proprietary coding is contained in the measure specifications for convenience. Users of the proprietary code sets should obtain all necessary licenses from the owners of these code sets. NCQA disclaims all liability for use or accuracy of any coding contained in the specifications.

Anyone desiring to use or reproduce the measure abstracts without modification for a non-commercial purpose may do so without obtaining any approval from NCQA. All commercial uses of the measure abstracts must be approved by NCQA and are subject to a license at the discretion of NCQA. To purchase copies of the full measures and specifications, which contain additional distribution and use restrictions, contact NCQA Customer Support at 888-275-7585 or visit www.ncqa.org/publications .

Production

Source(s)

National Committee for Quality Assurance (NCQA). HEDIS 2016: Healthcare Effectiveness Data and Information Set. Vol. 1, narrative. Washington (DC): National Committee for Quality Assurance (NCQA); 2015. various p.

National Committee for Quality Assurance (NCQA). HEDIS 2016: Healthcare Effectiveness Data and Information Set. Vol. 2, technical specifications for health plans. Washington (DC): National

Disclaimer

NQMC Disclaimer

The National Quality Measures Clearinghouse[®] (NQMC) does not develop, produce, approve, or endorse the measures represented on this site.

All measures summarized by NQMC and hosted on our site are produced under the auspices of medical specialty societies, relevant professional associations, public and private organizations, other government agencies, health care organizations or plans, individuals, and similar entities.

Measures represented on the NQMC Web site are submitted by measure developers, and are screened solely to determine that they meet the [NQMC Inclusion Criteria](#).

NQMC, AHRQ, and its contractor ECRI Institute make no warranties concerning the content or its reliability and/or validity of the quality measures and related materials represented on this site. Moreover, the views and opinions of developers or authors of measures represented on this site do not necessarily state or reflect those of NQMC, AHRQ, or its contractor, ECRI Institute, and inclusion or hosting of measures in NQMC may not be used for advertising or commercial endorsement purposes.

Readers with questions regarding measure content are directed to contact the measure developer.